## Bachelor of Science – Geology 2019/20

Name:	
Student #:	Admission Year:

YEAR ONE - FALL		
GEOL 1101 FW		
	Physical Geology	
CHEM 1201 FW	General Chemistry – Structure and Bonding	
MATH 1200 FW	Calculus for Scientists I	
PHYS 1201 FW	Classical Physics I	
GNED Foundation FW Cluster 1	GNED 1101 or GNED 1103	
YEAR ONE - WINTER		
GEOL 1103 FW	Historical Geology	
MATH 1203 FW	Linear Algebra for Scientists and Engineers	
COMP 2001 FW	Computer- Based Problem Solving for the Sciences	
GNED Foundation FW Cluster 4	GNED 1401 or GNED 1404	
GNED Foundation <sup>FW</sup> Cluster 2 or 3		
YEAR TWO - FALL		1.5 CD
GEOL 2300 <sup>F</sup>	Introduction to Geological Field Methods I (runs in August – 6 days)	1.5 CR
GEOL 2103 <sup>F</sup>	Minerals and Rocks	
GEOL 2105 <sup>F</sup>	Structural Geology	
CHEM 1202 <sup>FW</sup>	General Chemistry – Introduction to Quantitative Chemistry	
PHYS 1202 <sup>FW</sup>	Classical Physics II	
GNED Foundation FW Cluster 3		
YEAR TWO - WINTER		
GEOL 2107 <sup>w</sup>	Paleontology	
GEOL 2109 <sup>w</sup>	Stratigraphy and Sedimentation	
GEOL 2111 <sup>w</sup>	Crystallography and Optical Mineralogy	
GNED Tier 2 Cluster2FW		
GNED Tier 2 Cluster 3 <sup>FW</sup>		
YEAR THREE - FALL		
GEOL 3300 <sup>F</sup>	Geological Field Methods II (runs in August – 5 days)	1.5 CR
GEOL 3103 <sup>F</sup>	Igneous Petrology	
GEOL 3107 <sup>F</sup>	Geomorphology	
GEOL 3109 <sup>F</sup>	Sedimentary Petrology	
GNED Tier 2 Cluster 4 <sup>FW</sup>		
Elective		
Elective YEAR THREE - WINTER		
	Metamorphic Petrology	
YEAR THREE - WINTER	Metamorphic Petrology Geochemistry	
YEAR THREE - WINTER GEOL 3111 <sup>W</sup>		
YEAR THREE - WINTER GEOL 3111 <sup>W</sup> GEOL 3113 <sup>W</sup>	Geochemistry	
YEAR THREE - WINTER GEOL 3111 <sup>W</sup> GEOL 3113 <sup>W</sup> GEOL 3115 <sup>W</sup>	Geochemistry	
YEAR THREE - WINTER GEOL 3111 <sup>W</sup> GEOL 3113 <sup>W</sup> GEOL 3115 <sup>W</sup> GNED Tier 3 <sup>FW</sup>	Geochemistry	
YEAR THREE - WINTER GEOL 3111 <sup>W</sup> GEOL 3113 <sup>W</sup> GEOL 3115 <sup>W</sup> GNED Tier 3 <sup>FW</sup> GNED Tier 3 <sup>FW</sup>	Geochemistry	
YEAR THREE - WINTER GEOL 3111 <sup>W</sup> GEOL 3115 <sup>W</sup> GEOL 3115 <sup>W</sup> GNED Tier 3 <sup>FW</sup> GNED Tier 3 <sup>FW</sup> YEAR FOUR- FALL	Geochemistry Exploration Geophysics	
YEAR THREE - WINTER GEOL 3111 <sup>W</sup> GEOL 3115 <sup>W</sup> GEOL 3115 <sup>W</sup> GNED Tier 3 <sup>FW</sup> GNED Tier 3 <sup>FW</sup> YEAR FOUR- FALL GEOL 4300 <sup>F</sup>	Geochemistry  Exploration Geophysics  Advanced Geological Field Methods (2 week course runs in August)	
YEAR THREE - WINTER GEOL 3111 <sup>W</sup> GEOL 3113 <sup>W</sup> GEOL 3115 <sup>W</sup> GNED Tier 3 <sup>FW</sup> GNED Tier 3 <sup>FW</sup> YEAR FOUR- FALL GEOL 4300 <sup>F</sup> GEOL 4105 <sup>F</sup>	Geochemistry  Exploration Geophysics  Advanced Geological Field Methods (2 week course runs in August)  Hydrogeology  Geological History of Western Canada OR Geology of the Canadian	
YEAR THREE - WINTER GEOL 3111 <sup>W</sup> GEOL 3115 <sup>W</sup> GEOL 3115 <sup>W</sup> GNED Tier 3 <sup>FW</sup> GNED Tier 3 <sup>FW</sup> YEAR FOUR- FALL GEOL 4300 <sup>F</sup> GEOL 4105 <sup>F</sup> GEOL 4107 <sup>F</sup> or GEOL 4607	Geochemistry  Exploration Geophysics  Advanced Geological Field Methods (2 week course runs in August)  Hydrogeology  Geological History of Western Canada OR Geology of the Canadian Cordillera	
YEAR THREE - WINTER GEOL 3111 <sup>W</sup> GEOL 3113 <sup>W</sup> GEOL 3115 <sup>W</sup> GNED Tier 3 <sup>FW</sup> GNED Tier 3 <sup>FW</sup> YEAR FOUR- FALL GEOL 4300 <sup>F</sup> GEOL 4105 <sup>F</sup> GEOL 4107 <sup>F</sup> or GEOL 4607 MATH 2235 <sup>F</sup> Choose one of:	Geochemistry  Exploration Geophysics  Advanced Geological Field Methods (2 week course runs in August)  Hydrogeology  Geological History of Western Canada OR Geology of the Canadian Cordillera  Statistics with Applications in Geology  Advanced Topics in Sedimentary Geology OR Advanced Topics in Igneous/Metamorphic	
YEAR THREE - WINTER GEOL 3111 <sup>W</sup> GEOL 3113 <sup>W</sup> GEOL 3115 <sup>W</sup> GNED Tier 3 <sup>FW</sup> GNED Tier 3 <sup>FW</sup> YEAR FOUR- FALL GEOL 4300 <sup>F</sup> GEOL 4105 <sup>F</sup> GEOL 4107 <sup>F</sup> or GEOL 4607 MATH 2235 <sup>F</sup> Choose one of: GEOL 4101 <sup>F</sup> / 4103 <sup>F</sup> /4515/4601	Geochemistry  Exploration Geophysics  Advanced Geological Field Methods (2 week course runs in August)  Hydrogeology  Geological History of Western Canada OR Geology of the Canadian Cordillera  Statistics with Applications in Geology  Advanced Topics in Sedimentary Geology OR Advanced Topics in Igneous/Metamorphic	
YEAR THREE - WINTER GEOL 3111 <sup>W</sup> GEOL 3115 <sup>W</sup> GEOL 3115 <sup>W</sup> GNED Tier 3 <sup>FW</sup> GNED Tier 3 <sup>FW</sup> YEAR FOUR- FALL GEOL 4300 <sup>F</sup> GEOL 4105 <sup>F</sup> GEOL 4107 <sup>F</sup> or GEOL 4607 MATH 2235 <sup>F</sup> Choose one of: GEOL 4101 <sup>F</sup> / 4103 <sup>F</sup> /4515/4601 YEAR FOUR - WINTER	Geochemistry  Exploration Geophysics  Advanced Geological Field Methods (2 week course runs in August)  Hydrogeology  Geological History of Western Canada OR Geology of the Canadian Cordillera  Statistics with Applications in Geology  Advanced Topics in Sedimentary Geology OR Advanced Topics in Igneous/Metamorphic Geology OR Sedimentary Basin Analysis OR Plate Tectonic Regimes	
YEAR THREE - WINTER GEOL 3111 <sup>W</sup> GEOL 3113 <sup>W</sup> GEOL 3115 <sup>W</sup> GNED Tier 3 <sup>FW</sup> GNED Tier 3 <sup>FW</sup> YEAR FOUR- FALL GEOL 4300 <sup>F</sup> GEOL 4105 <sup>F</sup> GEOL 4107 <sup>F</sup> or GEOL 4607 MATH 2235 <sup>F</sup> Choose one of: GEOL 4101 <sup>F</sup> / 4103 <sup>F</sup> /4515/4601 YEAR FOUR - WINTER GEOL 4109 <sup>W</sup>	Geochemistry  Exploration Geophysics  Advanced Geological Field Methods (2 week course runs in August)  Hydrogeology  Geological History of Western Canada OR Geology of the Canadian Cordillera  Statistics with Applications in Geology  Advanced Topics in Sedimentary Geology OR Advanced Topics in Igneous/Metamorphic Geology OR Sedimentary Basin Analysis OR Plate Tectonic Regimes  Petroleum Geology	



## PLEASE READ:

General Education: General Education approved courses, otherwise known as "GNED requirements" are designed to give you a well-rounded knowledge base and are organized into 4 thematic clusters. Each Cluster has 3 levels: tier 1 (foundation), tier 2 and tier 3.

Cluster 1: Numeracy & Scientific Literacy Cluster 2: Values, beliefs & Identity

Cluster 3: Community & Society Cluster 4: Communication

Students must take a foundation level course

Students must take a foundation level course from each of the four clusters, three tier 2 GNEDs (one from each of cluster 2, 3, and 4), and three tier 3 GNEDs from at least two clusters, for a total of 10 GNED courses.

Visit mtroyal.ca/gened/courses\_for more information and a list of GNED courses.

**Junior courses:** are courses at the 1000 level. Students are allowed a maximum of 16 junior courses.

**Prerequisites & Course descriptions:** can be found in the Academic Calendar or by visiting: mtroyal.ca/ProgramsCourses/CourseListings

Advising Plan: This a suggested sequence for taking the required courses for your major. This plan factors in prerequisite requirements and will allow you to complete your degree in 4 years, provided you complete 5 courses per semester. This is just one example of how you can complete your degree requirements; you may find that a different sequence or smaller course load works better for you.

To be considered full time a student must be enrolled in a minimum of three 3 credit courses.

- F Indicates that the course runs in Fall semester only.
- W Indicates that the course runs in Winter semester only.
- FW Indicates that the course is offered in both Fall and Winter semester

MRU's Geology program meets the Geoscience knowledge and experience requirements for professional registration in Canada. Please see APEGA website for more information.

APEGA: The Association of Professional Engineers and Geoscientists of Alberta.

This document is only intended to be a guide for students and should be used together with the Mount Royal University Academic Calendar which states academic policies and degree requirements. Be sure to consult with your Academic Advisor to confirm graduation requirements or if you have any questions.